

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Original) A process for preparing (per)fluorohalogenethers containing the $-SO_2F$ group and having general formula (I):



wherein:

- A and A', equal to or different from each other, are Cl or Br;
- R can have the following meanings: a (per)fluorinated, preferably perfluorinated, substituent, selected from the following groups: linear or branched C₁-C₂₀ alkyl, C₃-C₇ cycloalkyl; aromatic, C₆-C₁₀ arylalkyl or alkylaryl; C₅-C₁₀ heterocyclic or alkylhetero-cyclic;
optionally containing one or more oxygen atoms;
when R is fluorinated, it can optionally contain one or more H atoms and/or one or more halogen atoms different from F;

by reaction of carbonyl compounds having formula (II):



wherein R is as above;

in liquid phase with elemental fluorine and with olefinic compounds having formula (III):



wherein A and A' are as above,

by operating at temperatures from -120°C to -20°C, preferably from -100°C to -40°C, optionally in the presence of a solvent inert under the reaction conditions.

2. (Original) A process according to claim 1, wherein the fluorine is diluted with an inert gas selected between nitrogen or helium.
3. (Currently Amended) A process according to ~~claims 1-2~~claim 1, wherein the formula (III) compounds are selected from 1,2-dichloro-1,2-difluoroethylene (CFC 1112), 1,2-dibromo-1,2-difluoroethylene, preferably CFC 1112.
4. (Currently Amended) A process according to ~~claims 1-3~~claim 1, wherein the solvent is selected from the group comprising the following compounds: (per)fluorocarbons, (per)fluoroethers, (per)fluoro-polyethers, perfluoroamines, or respective mixtures; fluoropolyethers containing at least one hydrogen atom in one end group, preferably in both end groups; fluoroethers containing at least one hydrogen atom in one end group, preferably in both end groups, or containing non fluorinated end groups of the type OR_a wherein R_a is an alkyl from 1 to 3 carbon atoms.
5. (Currently Amended) A process according to ~~claims 1-4~~claim 1, wherein, when R in formula (I) is fluorinated, it optionally contains one or more H atoms and/or one or more halogen atoms different from F, preferably Cl.
6. (Currently Amended) A process according to ~~claims 1-5~~claim 1 carried out in a semicontinuous or a continuous way.
7. (Original) A semicontinuous process according to claim 6, wherein the molar ratio (I):(III) ranges from 10:1 to 1:20 and the used amount by moles of fluorine is equal to or lower than the amount by moles of (III).

8. (Original) A continuous process according to claim 6, wherein the molar ratio (II):(III) is

as defined in claim 7 and the molar ratio F₂:(III) ranges from 1:20 to 10:1.

9. (Currently Amended) A process according to ~~claims 1-8~~claim 1, wherein one operates at partial conversion of compound (II), preferably the conversion ranges from 10% to 40%, still more preferably from 10% to 20%.

10. (Currently Amended) A process according to ~~claims 1-9~~claim 1, wherein the dehalogenation step is carried out to obtain the fluorinated vinyl ethers.